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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,618	09/26/2001	Ali Emam Bakhsh	TRW(AP)5810	9744

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EXAMINER

DUNN, DAVID R

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 08/08/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,618

Applicant(s)

BAKHSH ET AL.

Examiner

David Dunn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

This Office Action is responsive to the amendment filed 6/26/03 in which claim 4 was canceled and new claims 28-32 were added.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 2, 3, 7-14, and 20-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 2, 7, 9, 11, 20-22, and 24-30 recite limitations related to the “occupant’s head”; i.e., the claims positively recite part of the human body which is nonstatutory subject matter (the occupant is a necessary part of the claim limitations: “moving the occupant’s head”, etc.).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by Nakajima et al. (6,334,626).

Nakajima et al. discloses an inflatable vehicle occupant protection device (16; see Figure 4) inflatable away from the vehicle roof (see Figure 5) into a position between the side structure (39) and a vehicle occupant, said inflatable vehicle occupant protection device being constructed and arranged to during inflation engage an occupant's head positioned against the side structure of the vehicle and move the occupant's head laterally in the vehicle and away from the vehicle side structure, said inflatable vehicle occupant protection device inflating between the side structure of the vehicle and the occupant's head (the airbag would inherently be able to inflate as such; note angle of deployment in Figure 5).

5. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by White et al. (6,179,324).

White et al. discloses an inflatable vehicle occupant protection device (80; see Figure 4) inflatable away from the vehicle roof (40) into a position between the side structure and a vehicle occupant, said inflatable vehicle occupant protection device being constructed and arranged to during inflation engage an occupant's head positioned against the side structure of the vehicle and move the occupant's head laterally in the vehicle and away from the vehicle side structure, said inflatable vehicle occupant protection device inflating between the side structure of the vehicle and the occupant's head (the airbag would inherently be able to inflate as such; note angle of deployment toward the side structure; see Figures 4-5).

White et al. shows housing (130, etc) for storing the airbag. With respect to claim 31, as seen in Figure 4, the angle is about 30 degrees relative to a vertical axis. With respect to claim

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32, the airbag is adapted to engage the occupant's head proximate a location where the occupant's head engages the vehicle side structure (dependent upon the size and posture of the occupant).

6. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al. (6,082,761).

Kato et al. discloses an inflatable vehicle occupant protection device (12; see Figure 5) inflatable away from the vehicle roof into a position between the side structure and a vehicle occupant, said inflatable vehicle occupant protection device being constructed and arranged to during inflation engage an occupant's head positioned against the side structure of the vehicle and move the occupant's head laterally in the vehicle and away from the vehicle side structure, said inflatable vehicle occupant protection device inflating between the side structure of the vehicle and the occupant's head (the airbag would inherently be able to inflate as such; note angle of deployment toward the side structure; see Figures 3-4).

Kato also shows the air bag including an interconnection (see 16, 10; Figure 6) between two overlying panels (column 5, lines 12-21) which forms a forwardmost, rearwardmost, and a middle chamber.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1, 5, 6, 15-18, 20-27, 31, and 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. et al. (6,179,324) in view of Hoeft et al. (2002/0158450).

White, Jr. et al. is discussed above and fails the airbag rolled up in an outboard direction.

Hoeft et al. shows a side airbag rolled up in an outboard direction (see Figure 4a) about an axis extending generally parallel to the length of the airbag. Hoeft et al. also shows a fill tube (28) for directing inflation fluid into the airbag. Hoeft et al. shows a stored gas inflator (see paragraph 0027). With respect to claim 23, Hoeft et al. shows a fold-out portion rearward (see Figure 2, last portion 65) of the rearwardmost portion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify White, Jr. et al. with the teachings of Hoeft et al. in order to provide an improved storage of the airbag and a more controlled inflation.

With respect to claims 20-22 and 24-27, Hoeft et al. shows an inflatable first portion (i.e., a front or rear portion 65; see Figure 2) and a second portion (a portion adjacent the occupant's head, portion 65 next to the front or rear portion 65); the airbag of White, Jr. et al. with portions as shown by Hoeft et al. would deploy with the first portion is deployed adjacent the forward (or rearward) end of the vehicle and below the occupant's head, and the second portion engages the occupant's head and continues unrolling between the head and the side of the vehicle (inherently, the airbag could unfold as such).

9. Claims 2, 3, 7, 9-14 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. et al. in view of Hoeft et al. as applied above, and further in view of Webber et al. (6,168,191).

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The combination of White, Jr. et al. and Hoeft et al. is discussed above and fails to show the connection interconnecting overlying panels.

Webber teaches a side air bag including an interconnection (see, for example, Figure 5A) between two overlying panels (column 3, lines 1-2) which forms a forwardmost, rearwardmost, and a middle chamber. With respect to claim 3, the front connection 340 helps direct inflation fluid into the forwardmost chamber to initially deploy the forwardmost chamber. The second portion is inflated at least partially by inflation fluid directed forward from the rearwardmost chamber into the first portion (see Figure 5A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of White, Jr. et al. and Hoeft et al. with the teachings of Webber et al. in order to provide interconnection between two panels such that the bag is easier to produce and chambers to improve the inflation and stiffness of the airbag.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. et al. in view of Hoeft et al. as applied above, and further in view of Yamaji et al. (6,056,316).

The combination of White, Jr. et al. and Hoeft et al. is discussed above and fails to disclose the airbag remaining inflated for at least five seconds.

Yamaji et al. teaches a side air bag with an inflator such that the airbag can remain inflated for about 5 seconds (see column 4, lines 59-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of White, Jr. et al. and Hoeft et al. with the teachings of Yamaji et al. in order to better protect the occupants in case of a vehicle rollover.

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11. Claims 1-3, 5-7, 9-11, 13-18, 20-28, 31, and 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Hoeft et al. (2002/0158450).

White, Jr. et al. is discussed above and fails the airbag rolled up in an outboard direction.

Hoeft et al. shows a side airbag rolled up in an outboard direction (see Figure 4a) about an axis extending generally parallel to the length of the airbag. Hoeft et al. also shows a fill tube (28) for directing inflation fluid into the airbag. Hoeft et al. shows a stored gas inflator (see paragraph 0027). With respect to claim 23, Hoeft et al. shows a fold-out portion rearward (see Figure 2, last portion 65) of the rearwardmost portion. The connections (63) help inflation fluid direct to the forwardmost chamber (see Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kato et al. with the teachings of Hoeft et al. in order to provide an improved storage of the airbag and a more controlled inflation.

With respect to claims 20-22 and 24-27, Hoeft et al. shows an inflatable first portion (i.e., a front or rear portion 65; see Figure 2) and a second portion (a portion adjacent the occupant's head, portion 65 next to the front or rear portion 65); the airbag of Kato et al. with portions as shown by Hoeft et al. would deploy with the first portion is deployed adjacent the forward (or rearward) end of the vehicle and below the occupant's head, and the second portion engages the occupant's head and continues unrolling between the head and the side of the vehicle (inherently, the airbag could unfold as such). With respect to claim 31, while Kato shows the airbag at different angles at various positions (see Figures 3&4), it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the angle of deployment at 30

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degrees in order to better direct the airbag toward the window dependent upon the style and size of vehicle.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Hoeft et al. as applied above, and further in view of Webber et al.

The combination of Kato et al. and Hoeft et al. is discussed above and fails to show the inflation fluid being directed from the rearwardmost chamber to the first chamber.

Webber et al. is discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kato et al. and Hoeft et al. with the teachings of Webber et al. in order to provide an improved inflation of the airbag.

13. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Hoeft et al. as applied above, and further in view of Yamaji et al. (6,056,316).

The combination of Kato et al. and Hoeft et al. is discussed above and fails to disclose the airbag remaining inflated for at least five seconds.

Yamaji et al. teaches a side air bag with an inflator such that the airbag can remain inflated for about 5 seconds (see column 4, lines 59-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kato et al. and Hoeft et al. with the teachings of Yamaji et al. in order to better protect the occupants in case of a vehicle rollover.

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Allowable Subject Matter

14. Claims 8 and 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

15. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

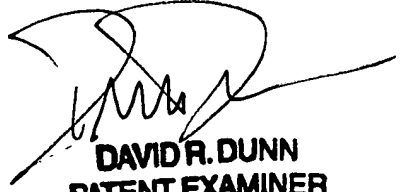
Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stutz et al. shows a side air bag of interest.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. The examiner can normally be reached on Mon-Thur, alt. Fridays, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1113.


DAVID R. DUNN
PATENT EXAMINER